

### Abstract

Method and arrangement for encoding and decoding images.

A method of encoding images (1) including areas (11) of relevant pixels and areas (12) of irrelevant pixels (e.g. a background) is disclosed. The pixels of the irrelevant area are replaced (4) by pseudo-pixels smoothing the transition between said areas. The image thus obtained is subsequently subjected to conventional image coding (5) which now yields  
5 considerably fewer bits. At the receiver end, the pseudo-pixels are replaced (9) by predetermined background pixels to reconstruct the original boundaries (13). If the boundary between both areas is not known in advance, the boundary is detected (2), encoded (3) and transmitted to the receiver. The invention is particularly applicable to compression of medical images having circular areas of interest, but may also be used to encode other video images having irrelevant  
10 areas such as videophone images in which a head-and-shoulder area constitutes relevant information only.

Fig.1